

04-NOV-09
14:37:10

GEORGIA DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION - OFFICE OF BRIDGE & STRUCTURAL DESIGN
THE ANALYSIS AND DESIGN OF PIERS FOR BRIDGES - V 4.2.07 - AASHTO SPECS 1984 INTERIM
REVISED: JUNE 30, 2008
32' CURB-CURB; 5 BEAMS; 140' SPAN; 50' TALL; BRIDGE 7 ; PIER 2, 3

PROB. NO. 0001

| DESIGN NO. | NO. CAN | NO. COL | NO. LLC | SKEW D | ANG M | F'C PSI | FC PSI | N | FY PSI | FS PSI | DESIGN DATA EC KSI | ES KSI | CONC. STRAIN | Z FACT | * MAIN SIZE | * STR TOP | * CAP MAX TOP | REINFORCING MAX BOT | STEEL MIN SIZE | * MIN NO. | * TOP CL. | * MIN S.SP | * CAP INCR. | * CAP CL. |
|------------|---------|---------|---------|---------|-------|---------|--------|----|--------|--------|--------------------|--------|--------------|--------|-------------|-----------|---------------|---------------------|----------------|-----------|-----------|------------|-------------|-----------|
| D D D L | 2 | 1 | 8 | 0-00-00 | | 3500. | 1400. | 8. | 60000. | 24000. | 3409. | 29000. | 0.0030 | 170. | 11 | 5 | 16 | 16 | 11 | 2 | 2.00 | 4.00 | 3.00 | 2.00 |

| COLUMN MIN.P | REINFORCING MAX.P | STEEL CL.SP | STEEL CLEAR | R MODE | KL COEF | OC | OF | CM | BD1 | BD2 | IMPACT % | SOIL KCF | WT KSF | ALL.S.P. | MIN PL | MAX SP | EDGE DIST | PILE DEPTH | REBAR CLEAR | ALL.PILE CAPACITY | PILE UPLIFT | ALL.PILE I P |
|--------------|-------------------|-------------|-------------|--------|---------|------|------|------|------|------|----------|----------|--------|----------|--------|--------|-----------|------------|-------------|-------------------|-------------|--------------|
| 1.00 | 8.00 | 2.50 | 3.750 | 2 | 2.00 | 0.70 | 0.90 | 1.00 | 1.00 | 0.75 | 18.87 | 0.120 | 0.000 | 3.00 | 9.00 | 1.250 | 1.000 | 3.000 | 235.000 | -9.999 | | |

CAP DATA

| CN | C | L | A | DE | BC | BE | DH | LH | XB1 | XB2 | XB3 | XB4 | XB5 | XB6 | XB7 | XB8 |
|----|---|----------------------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-----|-----|-----|-----|-----|
| 11 | L | 17.625 | 4.000 | 4.000 | 6.000 | 6.000 | 4.000 | 13.625 | 14.000 | 7.000 | 3.000 | | | | | |
| 12 | 2 | SAME AS CANTILEVER 1 | | | | | | | | | | | | | | |

COLUMN DATA

| CN | P | I | T | S | HT | A | DT | BT | DB | BB | DL | FLEX | ND | NB | SZ | ND | NB | SZ | ND | NB | SZ | SLOPE | EP | AP | | | |
|----|---|---|---|---|--------|-------|-------|-------|-------|-------|-------|-------|----|----|----|----|----|----|----|----|----|-------|----|----|-------|-------|-------|
| 21 | 1 | C | T | | 50.000 | 0.000 | 8.000 | 6.000 | 8.000 | 6.000 | 6.000 | 0.000 | 8 | 6 | 11 | 8 | 6 | 11 | 22 | 16 | 11 | 22 | 16 | 11 | 0.000 | 0.000 | 0.000 |

FOOTING DATA

| CN | S/P | B | D | T | DEL.B | DEL.D | DEL.T | R.B/D | R.D/B | S.HT. | NP | SYM. | BP | DP | SET. |
|----|-----|--------|--------|-------|-------|-------|-------|-------|-------|-------|----|------|-------|-------|-------|
| 31 | P | 10.000 | 10.000 | 3.000 | 0.500 | 0.500 | 0.250 | 1.000 | 1.000 | 2.500 | 4 | 3 | 0.000 | 0.000 | 0.000 |

| GROUP II WIND INTENSITIES | | | | | | | | | | | | | | | | | | |
|---------------------------|-----|-----|------------|-----|-----|----------|-----|----------|-----|----------|-----|----------|-----|---------------|-------------------|-------|-------|--------|
| WIND TRANS. | FT1 | FL1 | WIND LONG. | FT1 | FL1 | WIND FT2 | FL2 | WIND FT3 | FL3 | WIND FT4 | FL4 | WIND FT5 | FL5 | * WIND ON APT | * WIND ON PIER PL | | | |
| 1365. | | | 2730. | 1 | 50 | 0 | 44 | 6 | 41 | 12 | 33 | 16 | 17 | 19 | 7.375 | 7.375 | 6.475 | 15.027 |

| GROUP III WIND INTENSITIES | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|------------|----------|-----|----------|-----|----------|-----|----------|-----|-----------------|------------|----------|-----|----------|-----|----------|-----|----------|-----|---------------------|-----------|---------------|-------------|--------|--------|
| STD. WIND FT1 | * WIND FT1 | WIND FT2 | FL2 | WIND FT3 | FL3 | WIND FT4 | FL4 | WIND FT5 | FL5 | * STD. WIND FT1 | * WIND FT1 | WIND FT2 | FL2 | WIND FT3 | FL3 | WIND FT4 | FL4 | WIND FT5 | FL5 | * LENGTHS OF TRANS. | LL LONGI. | * WIND ON APT | LL ARMS APL | | |
| 1 | 50 | 0 | 44 | 6 | 41 | 12 | 33 | 16 | 17 | 19 | 1 | 100 | 0 | 88 | 12 | 82 | 24 | 66 | 32 | 34 | 38 | 140.0 | 280.0 | 15.583 | 15.583 |

| MISCELLANEOUS FORCES | | | | | | | |
|----------------------|-------------|-----------|--------------|-----------------------|-----------------------|-----------|---------|
| CENTRI. FT | TRACTION FL | FORCE APT | AND ARMS APL | EXPANSION COEFFICIENT | SHRINKAGE COEFFICIENT | STREAM PT | FLOW PL |
| 0.000 | 9.860 | 15.583 | 15.583 | 0.00018000 | 0.00044000 | 0.000 | 0.000 |

DEAD LOAD SUPERSTRUCTURE AND LIVE LOAD CASES

| I.D. | NL | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 |
|------|----|---------|---------|-------|---------|-------|---------|---------|----|----|-----|-----|-----|
| D.L. | 0 | 265.598 | 299.028 | 0.000 | 299.028 | 0.000 | 299.028 | 265.598 | | | | | |
| LL 1 | 1 | 78.521 | 58.890 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | |
| LL 2 | 2 | 78.521 | 98.151 | 0.000 | 78.521 | 0.000 | 19.630 | 0.000 | | | | | |
| LL 3 | 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 58.890 | 78.521 | | | | | |
| LL 4 | 2 | 0.000 | 19.630 | 0.000 | 78.521 | 0.000 | 98.151 | 78.521 | | | | | |
| LL 5 | 1 | 0.000 | 29.445 | 0.000 | 78.521 | 0.000 | 29.445 | 0.000 | | | | | |
| LL 6 | 2 | 58.890 | 107.966 | 0.000 | 78.521 | 0.000 | 29.445 | 0.000 | | | | | |
| LL 7 | 2 | 9.815 | 78.521 | 0.000 | 98.151 | 0.000 | 78.521 | 9.815 | | | | | |
| LL 8 | 2 | 78.521 | 58.890 | 0.000 | 0.000 | 0.000 | 58.890 | 78.521 | | | | | |

COLUMN MOMENTS(KIP- FEET), SHEARS(KIPS), REACTIONS(KIPS)

| TRANSVERSE | | | | | | | | | | | | * LONGITUDINAL | | |
|------------------|-----|----------------------|----------|--------|----------|----------|----------|-----------|----------|---------|-----------|----------------|--|--|
| LOAD | COL | PC | MT | V | MB | RF | ML | MR | MT | V | MB | MF | | |
| UNIT F.AT CL.CAP | 1 | 0.000 | -6.000 | 1.000 | 50.000 | 0.000 | 0.000 | 0.000 | 6.000 | 1.000 | 50.000 | 50.000 | | |
| DEAD LOAD TOTAL | 1 | 1633.030 1949.830 | 0.000 | 0.000 | 0.000 | 1949.830 | 6609.005 | -6609.005 | 0.000 | 0.000 | 0.000 | 0.000 | | |
| TRAC. FORCE 1 LN | 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -212.808 | -9.860 | -646.648 | -646.648 | | |
| WIND ON SUBSTR. | 1 | 0.000 | -38.850 | 6.475 | 323.750 | 0.000 | 0.000 | 0.000 | -90.162 | -15.027 | -751.350 | -751.350 | | |
| GROUP 2 WIND 1 1 | 1 | 0.000 | -951.694 | 74.725 | 4239.594 | 0.000 | 0.000 | 0.000 | -90.162 | -15.027 | -751.350 | -751.350 | | |
| GROUP 2 WIND 1 2 | 1 | 0.000 | -951.694 | 74.725 | 4239.594 | 0.000 | 0.000 | 0.000 | 90.162 | 15.027 | 751.350 | 751.350 | | |
| GROUP 2 WIND 2 1 | 1 | 0.000 | -842.152 | 66.535 | 3769.693 | 0.000 | 0.000 | 0.000 | -309.245 | -31.407 | -1691.153 | -1691.153 | | |
| GROUP 2 WIND 2 2 | 1 | 0.000 | -842.152 | 66.535 | 3769.693 | 0.000 | 0.000 | 0.000 | 309.245 | 31.407 | 1691.153 | 1691.153 | | |
| GROUP 2 WIND 3 1 | 1 | 0.000 | -787.382 | 62.440 | 3534.742 | 0.000 | 0.000 | 0.000 | -528.327 | -47.787 | -2630.955 | -2630.955 | | |
| GROUP 2 WIND 3 2 | 1 | 0.000 | -787.382 | 62.440 | 3534.742 | 0.000 | 0.000 | 0.000 | 528.327 | 47.787 | 2630.955 | 2630.955 | | |
| GROUP 2 WIND 4 1 | 1 | 0.000 | -641.327 | 51.520 | 2908.207 | 0.000 | 0.000 | 0.000 | -674.382 | -58.707 | -3257.490 | -3257.490 | | |
| GROUP 2 WIND 4 2 | 1 | 0.000 | -641.327 | 51.520 | 2908.207 | 0.000 | 0.000 | 0.000 | 674.382 | 58.707 | 3257.490 | 3257.490 | | |

| GROUP | WIND | 5 | 1 | 1 | 0.000 | -349.217 | 29.680 | 1655.137 | PIER-32-5-140-50.OUT | 0.000 | 0.000 | 0.000 | -783.923 | -66.897 | -3727.391 | -3727.391 | |
|-----------|----------|---|---|---|---------|-----------|--------|----------|----------------------|----------|----------|----------|----------|-----------|-----------|-----------|--|
| GROUP 2 | WIND 5 2 | 1 | 1 | 1 | 0.000 | -349.217 | 29.680 | 1655.137 | 0.000 | 0.000 | 0.000 | 783.923 | 66.897 | 3727.391 | 3727.391 | | |
| GROUP 3 | WIND 1 1 | 1 | 1 | 1 | 0.000 | -587.670 | 36.417 | 2190.040 | 0.000 | 0.000 | 0.000 | -27.049 | -4.508 | -225.405 | -225.405 | | |
| GROUP 3 | WIND 1 2 | 1 | 1 | 1 | 0.000 | -587.670 | 36.417 | 2190.040 | 0.000 | 0.000 | 0.000 | 27.049 | 4.508 | 225.405 | 225.405 | | |
| GROUP 3 | WIND 2 1 | 1 | 1 | 1 | 0.000 | -518.548 | 32.280 | 1938.890 | 0.000 | 0.000 | 0.000 | -165.292 | -12.782 | -727.705 | -727.705 | | |
| GROUP 3 | WIND 2 2 | 1 | 1 | 1 | 0.000 | -518.548 | 32.280 | 1938.890 | 0.000 | 0.000 | 0.000 | 165.292 | 12.782 | 727.705 | 727.705 | | |
| GROUP 3 | WIND 3 1 | 1 | 1 | 1 | 0.000 | -483.987 | 30.212 | 1813.315 | 0.000 | 0.000 | 0.000 | -303.536 | -21.056 | -1230.004 | -1230.004 | | |
| GROUP 3 | WIND 3 2 | 1 | 1 | 1 | 0.000 | -483.987 | 30.212 | 1813.315 | 0.000 | 0.000 | 0.000 | 303.536 | 21.056 | 1230.004 | 1230.004 | | |
| GROUP 3 | WIND 4 1 | 1 | 1 | 1 | 0.000 | -391.825 | 24.696 | 1478.449 | 0.000 | 0.000 | 0.000 | -395.698 | -26.572 | -1564.871 | -1564.871 | | |
| GROUP 3 | WIND 4 2 | 1 | 1 | 1 | 0.000 | -391.825 | 24.696 | 1478.449 | 0.000 | 0.000 | 0.000 | 395.698 | 26.572 | 1564.871 | 1564.871 | | |
| GROUP 3 | WIND 5 1 | 1 | 1 | 1 | 0.000 | -207.500 | 13.664 | 808.716 | 0.000 | 0.000 | 0.000 | -464.820 | -30.709 | -1816.021 | -1816.021 | | |
| GROUP 3 | WIND 5 2 | 1 | 1 | 1 | 0.000 | -207.500 | 13.664 | 808.716 | 0.000 | 0.000 | 0.000 | 464.820 | 30.709 | 1816.021 | 1816.021 | | |
| LIVE LOAD | LL 1 | 1 | 1 | 1 | 137.411 | -1511.524 | 0.000 | 1511.524 | 137.411 | 1511.524 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| LIVE LOAD | LL 2 | 1 | 1 | 1 | 274.823 | -1648.941 | 0.000 | 1648.941 | 274.823 | 1786.351 | -137.410 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |

□ COLUMN MOMENTS(KIP-FEET), SHEARS(KIPS), REACTIONS(KIPS)

| LOAD | COL | PC | MT | TRANSVERSE | | | | | | LONGITUDINAL | | | | |
|----------------|-----|---------|-----------|------------|-----------|---------|----------|-----------|-------|--------------|-------|-------|-------|-------|
| | | | | V | MB | RF | ML | MR | MT | V | MB | MF | | |
| LIVE LOAD LL 3 | 1 | 137.411 | 1511.524 | 0.000 | -1511.524 | 137.411 | 0.000 | -1511.524 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| LIVE LOAD LL 4 | 1 | 274.823 | 1648.941 | 0.000 | -1648.941 | 274.823 | 137.410 | -1786.351 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| LIVE LOAD LL 5 | 1 | 137.411 | 0.000 | 0.000 | 0.000 | 137.411 | 206.115 | -206.115 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| LIVE LOAD LL 6 | 1 | 274.822 | -1374.107 | 0.000 | 1374.107 | 274.822 | 1580.222 | -206.115 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| LIVE LOAD LL 7 | 1 | 274.823 | 0.000 | 0.000 | 0.000 | 274.823 | 687.057 | -687.057 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| LIVE LOAD LL 8 | 1 | 274.822 | 0.000 | 0.000 | 0.000 | 274.822 | 1511.524 | -1511.524 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

□ CAP ANALYSIS AND DESIGN DATA

CAP MOMENTS AND SHEARS

| POINT | D.L.TOT. | MOMENTS(KIP-FEET) | | | | | | SHEARS(KIPS) | | | | | |
|-------|-----------|-------------------|------------|-----------|-----------|-----------|------------|--------------|----------|----------|----------|-----------|-----------|
| | | G1 MAX.+ | G1 MAX.- | G2 MAX.+ | G2 MAX.- | G3 MAX.+ | G3 MAX.- | DL T.LT | DL T.RT | G1 + LT | G1 + RT | G1 - LT | G1 - RT |
| P 1 | -33.476 | -33.476 | -33.476 | -33.476 | -33.476 | -33.476 | -33.476 | -19.222 | -364.499 | -19.222 | -364.499 | -19.222 | -534.968 |
| P 2 | -2749.772 | -2749.772 | -3943.056 | -2749.772 | -2749.772 | -2749.772 | -3464.313 | -414.391 | -803.127 | -414.391 | -803.127 | -584.860 | -1186.682 |
| P 3 | -5198.182 | -5198.182 | -7542.130 | -5198.182 | -5198.182 | -5198.182 | -6601.744 | -829.661 | -829.661 | -829.661 | -829.661 | -1213.216 | -1213.216 |
| C 1L | -8591.707 | -8591.707 | -12469.875 | -8591.707 | -8591.707 | -8591.707 | -10913.963 | -867.101 | | -867.101 | | -1250.656 | |
| C 1R | -8591.707 | -8591.707 | -12469.875 | -8591.707 | -8591.707 | -8591.707 | -10913.963 | | 867.101 | | 1250.656 | | 867.101 |
| P 5 | -5198.182 | -5198.182 | -7542.130 | -5198.182 | -5198.182 | -5198.182 | -6601.744 | 829.661 | 829.661 | 1213.216 | 1213.216 | 829.661 | 829.661 |
| P 6 | -2749.772 | -2749.772 | -3943.056 | -2749.772 | -2749.772 | -2749.772 | -3464.313 | 803.127 | 414.391 | 1186.682 | 584.860 | 803.127 | 414.391 |
| P 7 | -33.476 | -33.476 | -33.477 | -33.476 | -33.476 | -33.476 | -33.477 | 364.499 | 19.222 | 534.968 | 19.222 | 364.499 | 19.222 |

| PT. | M+ UNF. K-FT. | M- UNF. K-FT. | TOP REINFORCE. | | BOT. REINFORCE. | | CAP DESIGN DATA | | | | RIGHT STIRRUPS | | D IN. | FC PSI | PS % | FS/FF RATIO | FS/FZ RATIO |
|-----|---------------|---------------|----------------|----------|-----------------|----------|-----------------|-------|----------|-------|----------------|----------|-------|--------|------|-------------|-------------|
| | | | AS | NO. SIZE | AS | NO. SIZE | M.SP. | AV/IN | BAR&SPAC | M.SP. | AV/IN | BAR&SPAC | | | | | |
| P 1 | -25.751 | -25.751 | 3.12 | 2 # 11 | 3.12 | 2 # 11 | 0.00 | 0.00 | #5@ 0.00 | 24.00 | 0.060 | #5@10.33 | 60.77 | | 0.08 | 0.000 | 0.098 |
| P 2 | -2115.209 | -2664.856 | 10.88 | 7 # 11 | 3.12 | 2 # 11 | 24.00 | 0.060 | #5@10.33 | 24.00 | 0.141 | #5@ 4.38 | 85.43 | | 0.19 | 0.577 | 1.351 |
| P 3 | -3998.602 | -5078.265 | 18.58 | 12 # 11 | 3.12 | 2 # 11 | 24.00 | 0.115 | #5@ 5.40 | 24.00 | 0.115 | #5@ 5.40 | 96.00 | | 0.31 | 0.587 | 1.125 |
| C 1 | -6609.005 | -8395.356 | 31.34 | 21 # 11 | 3.12 | 2 # 11 | 24.00 | 0.124 | #5@ 5.02 | 24.00 | 0.124 | #5@ 5.02 | 96.00 | | 0.52 | 0.554 | 0.961 |
| P 5 | -3998.602 | -5078.265 | 18.58 | 12 # 11 | 3.12 | 2 # 11 | 24.00 | 0.115 | #5@ 5.40 | 24.00 | 0.115 | #5@ 5.40 | 96.00 | | 0.31 | 0.587 | 1.125 |
| P 6 | -2115.209 | -2664.856 | 10.88 | 7 # 11 | 3.12 | 2 # 11 | 24.00 | 0.141 | #5@ 4.38 | 24.00 | 0.060 | #5@10.33 | 85.43 | | 0.19 | 0.577 | 1.351 |
| P 7 | -25.751 | -25.751 | 3.12 | 2 # 11 | 3.12 | 2 # 11 | 24.00 | 0.060 | #5@10.33 | 0.00 | 0.000 | #5@ 0.00 | 60.77 | | 0.08 | 0.000 | 0.098 |

NOTE: *** FS/FZ RATIO EXCEEDS 1.0! ***

□ COLUMN ANALYSIS AND DESIGN OUTPUT

| CN | T | B | GR | LLC | WC | R | E | C | S | F | PF | MTF | MLF | PM | MTM | MLM | PU | MTU | MLU | PU/PM | B | D |
|----|---|---|----|-----|-----|---|---|---|---|---|--------|---------|---------|--------|--------|--------|--------|---------|---------|-------|-------|-------|
| | | | | | | | | | | | | | | | | | | | | | | |
| 1 | T | 1 | LL | 2 | 0.0 | | | | | | 2719.6 | -3579.9 | 0.0 | 2719.6 | 4128.3 | 2093.2 | 9184.7 | 13949.4 | 7072.9 | 3.379 | 72.00 | 96.00 |
| 1 | B | 2 | | 4.1 | | | | | | | 2534.8 | 3780.7 | -4234.7 | 2534.8 | 4227.8 | 5136.1 | 5641.7 | 9445.9 | 11475.3 | 2.233 | 72.00 | 96.00 |

| CN | T | B | COLUMN DESIGN DATA | | | | AS | PS | BD12 | BD | SUMP | SUMPC | DEL.T | DEL.L | CM | R | PHIC | | | |
|----|---|----|--------------------|------------------|------------------|------------------|------|----|------|-------|-------|-------|-------|-------|--------|-------|-------|-------|---|------|
| | | | B FACE 1 NO.SIZE | B FACE 2 NO.SIZE | D FACE 3 NO.SIZE | D FACE 4 NO.SIZE | | | | | | | | | | | | | | |
| 1 | T | 15 | # 11 | 15 | # 11 | 8 | # 11 | 8 | # 11 | 71.76 | 1.038 | 1.00 | 0.000 | 2925. | 22021. | 1.153 | 1.283 | 1.000 | 2 | 0.70 |
| 1 | B | 15 | # 11 | 15 | # 11 | 8 | # 11 | 8 | # 11 | 71.76 | 1.038 | 1.00 | 0.000 | 2329. | 22021. | 1.118 | 1.213 | 1.000 | 2 | 0.70 |

□

FOOTING 1 DESIGN LOADS

| F | G | LLID | WC | ES | C | S | P | MT | VT | ML | VL | P4 | P3 | P2 | P1 | MTF | VBF | VPF | LOAD |
|---|---|------|-----|----|---|---|----------|----------|-----------------|---------|---------|--------|---------|---------|---------|--------|--------|-----|--------|
| 1 | 3 | LL 2 | 3.1 | | | | 2181.026 | 3200.495 | 30.212-2523.301 | -40.776 | 152.096 | 41.884 | 181.730 | 291.942 | 108.239 | -0.141 | 45.284 | | MAX.P1 |
| 1 | 2 | | 1.1 | | | | 2534.779 | 5511.472 | 97.142 -976.755 | -19.535 | 92.946 | 49.668 | 298.091 | 341.369 | 146.310 | -0.183 | 52.760 | | MAX.MT |
| 1 | 2 | | 3.1 | | | | 2534.779 | 4595.165 | 81.172-3420.241 | -62.123 | 167.199 | 16.687 | 223.839 | 374.351 | 136.555 | -0.183 | 52.760 | | MAX.VT |
| 1 | 3 | LL 2 | 3.1 | | | | 2835.334 | 4160.644 | 39.276-3280.291 | -53.009 | 197.724 | 54.449 | 236.249 | 379.524 | 140.711 | -0.183 | 58.870 | | MAX.VP |
| 1 | 2 | | 5.1 | | | | 2534.779 | 2151.678 | 38.584-4845.608 | -86.966 | 253.504 | 40.438 | 137.534 | 350.599 | 221.873 | 34.344 | 52.760 | | MAX.ML |
| 1 | 2 | | 5.1 | | | | 2534.779 | 2151.678 | 38.584-4845.608 | -86.966 | 253.504 | 40.438 | 137.534 | 350.599 | 221.873 | 34.344 | 52.760 | | MAX.VL |
| 1 | 2 | | 3.1 | | | | 1949.830 | 3534.742 | 62.440-2630.955 | -47.787 | 128.615 | 12.836 | 172.183 | 287.962 | 105.042 | -0.141 | 40.585 | | MAX.P3 |

FOOTING 1 ANALYSIS/DESIGN RESULTS

| FOOTING SIZE | | | | * BAR REINFORCEMENT STEEL * | | | | | SECTION CAPACITIES * | | | | |
|--------------|--------|-------|-------|-----------------------------|-----|------|---------|-----------|----------------------|--------|--------|--------|-------|
| B | D | T | P1/PA | AS | NO. | SIZE | SPAC. | PLACEMENT | MT. | VB | VP | DS | FC |
| 13.750 | 13.750 | 4.000 | 0.994 | 1.08 | 19 | # 8 | @ 8.625 | TOP TRAN | 148.219 | 37.522 | 75.044 | 31.090 | 0.000 |
| | | | | 1.59 | 15 | #11 | @11.000 | BOT.LONG | 236.369 | 38.976 | 77.952 | 32.295 | 0.000 |

NUMBER OF PILES = 14 BP = 1.875 DP = 1.875